UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,063	11/06/2006	Jens Bachmann	L7725.06109	8935

52989 7590 04/02/2009

Dickinson Wright PLLC
James E. Ledbetter, Esq.
International Square
1875 Eye Street, N.W., Suite 1200
Washington, DC 20006

EXAMINER	
PILAPITIYA, NALIN B	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
04/02/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,063	BACHMANN ET AL.	
	Examiner	Art Unit	
	NALIN PILAPITIYA	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *January 9, 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-46 and 49-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-46 and 49-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 46 is rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al (Pub. No.: US 2003/0048773 A1).

Re claim 46, Wu discloses a context transfer manager in a communication network comprising a plurality of heterogeneous access networks, wherein a mobile terminal is attached to one of the access networks, the context transfer manager comprising:

receiving unit operable to receive location information, (paragraph 14, 44, and 107)

processing unit to determine neighboring access networks for the mobile terminal based on the location information, (paragraph 61 and fig. 2)

context generation unit to generate at least one context for the neighboring access networks and the mobile terminal, (paragraph 61 and fig. 2)

transmitting unit to transmit the respective context to each of the neighboring access networks and the mobile terminal, (paragraph 61)

wherein the context generation unit is operable to generate the at least one context based on capabilities and parameters associated to the mobile

terminal and capabilities and parameters taking into account the respective access technology of the neighboring access network (paragraph 60 and 61), and wherein the context transfer manager is common to the plurality of heterogeneous access networks in the communication network and performs the context transfers related to said mobile terminal (paragraph 14 and 44).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 25 – 35, 37, 40, 43 - 45, and 49 - 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (Pub. No.: US 2003/0048773 A1) as applied to claim 25 above, and further in view of Narayanan (Pub. No.: US 2003/0103496 A1).

Re claim 25, Wu discloses a method for a context transfer in a communication network comprising a plurality of heterogeneous access networks, wherein a mobile terminal is attached to one of the access networks, the method comprising:

receiving location information at a context transfer manager, wherein the context transfer manager is common to the plurality of heterogeneous access networks in the communication network, (paragraph 14 and 44)

determining by the context transfer manager neighboring access networks for the mobile terminal based on the location information, (paragraph 106-108, 113, 118, 58, 60, and 63)

wherein the context transfer manager common to the plurality of heterogeneous access networks performs the context transfers related to said mobile terminal (paragraph 14 and 44) but fails to disclose generating by the context transfer manager at least one context for the neighboring access networks and the mobile terminal,

transmitting by the context transfer manager a context to each of the neighboring access networks and the mobile terminal,

wherein the generation of the at least one context is based on capabilities and parameters associated to the mobile terminal and capabilities and parameters of the neighboring access networks taking into account the respective access technology, and

However, Narayanan discloses generating by the context transfer manager at least one context for the neighboring access networks and the mobile terminal, (paragraph 76 and 77)

transmitting by the context transfer manager a context to each of the neighboring access networks and the mobile terminal, (paragraph 76 and 77)

wherein the generation of the at least one context is based on capabilities and parameters associated to the mobile terminal and capabilities and parameters of the neighboring access networks taking into account the respective access technology (paragraph 33-35, 57, 59, 73), and

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as claimed with a reasonable expectation of generating by the context transfer manager at least one context for the neighboring access networks and the mobile terminal, transmitting by the context transfer manager a context to each of the neighboring access networks and the mobile terminal, wherein the generation of the at least one context is based on capabilities and parameters associated to the mobile terminal and capabilities and parameters of the neighboring access

networks taking into account the respective access technology for the benefit of seamless handover across different access technologies.

Re claim 26, Wu and Narayanan discloses the method according to claim 25, and Wu further comprising the mobile terminal receiving at the mobile terminal a beacon signal indicating the presence of another access network, performing a handover from the current access network to the new access network from which the beacon signal is received (paragraph 14).

Re claim 27, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses wherein the context generated for each of the neighboring access networks and the mobile terminal comprises a static or temporary identifier of the mobile terminal (paragraph 63).

Re claim 28, Wu and Narayanan discloses the method according to claim 27, and Wu further discloses wherein the static or temporary identifier is used by a context manager in the new access network to associate the mobile terminal to its context received from the context transfer manager (paragraph 63, 64, and 60).

Re claim 29, Wu and Narayanan discloses the method according to claim 27, and Wu further discloses wherein the mobile terminal includes the static or temporary identifier in the data transmitted to the new access network (paragraph 63 and 64).

Re claim 30, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses further comprising pre-configuring the mobile

terminal based on the context received from the context transfer manager (paragraph 107).

Re claim 31, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses further comprising receiving status information from the mobile terminal at the context transfer manager, wherein the status information indicates the quality of service achieved in the current access network and/or indicates unsuccessful access attempts to at least one other access network than the current access network (paragraph 113 and 114).

Re claim 32, Wu and Narayanan discloses the method according to claim 31, and Wu further discloses wherein determining neighboring access networks comprises adapting a selection algorithm used for determining the neighboring access networks based on the status information from the mobile terminal (paragraph 113).

Re claim 33, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses to disclose further comprising storing information on failed access attempts to access networks reported by the mobile terminal at the context transfer manager (paragraph 42).

Re claim 34, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses wherein the capabilities and parameters associated to the mobile client comprise at least one of authentication (paragraph 60), authorization and accounting parameters comprising static and/or temporary terminal identifiers (paragraph 63), user preferences comprising the requirements

for the terminal's communications, guaranteed service quality parameters, and/or access permissions to services (paragraph 131 and 13), session data comprising encryption keys, seeds, ciphers and/or header compression information (paragraph 51 and 52), terminal capabilities comprising information on the display, network interfaces, processing power, supported applications and/or video/audio codecs (paragraph 85).

Re claim 35, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses wherein the capabilities and parameters of the neighboring access network comprise at least one of access technology specific attributes comprising a radio frequency, data rates, channels, and/or coding schemes (paragraph 72; different access technologies use different coding schemes), access network specific attributes comprising cryptographic capabilities of the respective access network, an access network identifier, supported quality of service mechanisms (paragraph 72), available traffic classes, local services, information portals, and/or public transportation information.

Re claim 37, Wu and Narayanan discloses the method according to claim 25, and Wu further discloses wherein the location information is based on a geographical location obtained from a location determining device or a network related location determined based on a network address and/or network prefix (paragraph 107 and fig. 3).

Re claim 40, Wu and Narayanan discloses the method according to claim 25, and Narayanan further discloses further comprising an authentication server in a neighboring access network receiving the context from the context transfer manager performing an registration and/or authentication procedure of the mobile terminal with the neighboring access network using the received context information (fig. 3, reference 325; paragraph 30, 34, 60, and 74; note that this is inherently present in AAA servers).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as claimed with a reasonable expectation of an authentication server in a neighboring access network receiving the context from the context transfer manager performing an registration and/or authentication procedure of the mobile terminal with the neighboring access network using the received context information for the benefit of preparing the new access network for a hand off.

Re claim 43, Wu and Narayanan discloses the method according to claim 25, and Narayanan further discloses wherein the context transfer manager resides in a visited communication network (paragraph 76 and fig. 1; AR1/PS1 and AR2/PS2 can be construed as context transfer managers).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as

claimed with a reasonable expectation of the context transfer manager residing in a visited communication network for the benefit of efficiently acquiring context information from the mobile to prepare the next access network for hand off.

Re claim 44, Wu and Narayanan disclose the method according to claim 43, and Narayanan discloses further comprising transmitting by a context transfer manager in a home communication network of the mobile terminal data relevant for the generation of the at least one context to the context transfer manager of the visited communication network (paragraph 57, 75 – 81).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as claimed with a reasonable expectation of transmitting by a context transfer manager in a home communication network of the mobile terminal data relevant for the generation of the at least one context to the context transfer manager of the visited communication network for the benefit of seamless handover across different access technologies.

Re claim 45, Wu and Narayanan discloses the method according to claim 25, and Narayanan further discloses further comprising the receiving at a context manager in an access network the context from the context transfer manager, wherein the context manager maintains no connection to another context manager in another access network (paragraph 75 – 81 and fig. 3; AR1 can be

construed as a context transfer manager and PS1 can be construed as a context transfer manager).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as claimed with a reasonable expectation of receiving at a context manager in an access network the context from the context transfer manager, wherein the context manager maintains no connection to another context manager in another access network for the benefit of transmitting context between context transfer managers when a single context transfer manager cannot link the access networks.

Re claim 49, Wu discloses a mobile terminal in use in a communication network comprising a plurality of heterogeneous access networks and a context transfer manager common to the plurality of heterogeneous access networks performs the context transfers related to said mobile terminal, wherein the mobile terminal is attached to one of the access networks, the mobile terminal comprising:

a transmitter adapted to transmit location information to the context transfer manager via the first access network wherein the location information are for use in determining a context at the context transfer manager, (paragraph 72, 107, and fig. 3)

wherein, upon handover of the mobile terminal to the second access network, the mobile terminal is further adapted to start communication via the second access network utilizing the pre-configured interface (paragraph 108 and 135) but fails to disclose a receiver adapted to receive from the context transfer manager a context via an interface of the mobile terminal to a first out of the plurality of access networks,

wherein the mobile terminal is adapted to pre-configure another interface of the mobile terminal to another, second access network based on information comprised in said context, and

However, Narayanan discloses a receiver adapted to receive from the context transfer manager a context via an interface of the mobile terminal to a first out of the plurality of access networks, **(paragraph 57, 76 and 77)**

wherein the mobile terminal is adapted to pre-configure another interface of the mobile terminal to another, second access network based on information comprised in said context **(paragraph 57, 76 and 77),** and

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as claimed with a reasonable expectation of receiver adapted to receive from the context transfer manager a context via an interface of the mobile terminal to a first out of the plurality of access networks, wherein the mobile terminal is adapted to pre-configure another interface of the mobile terminal to another,

second access network based on information comprised in said context for the benefit of seamless handover across different access technologies.

Re claim 50, Wu and Narayanan discloses the mobile terminal according to claim 49, and Wu further discloses wherein the mobile terminal is adapted to pre-configure the interface to the second access network by configuring at least one of a terminal identifier, a cryptographic key, a cryptographic algorithm, a Wireless Local Area Network (WLAN) Service Set Identifier (SSID), a new Internet Protocol (IP) address, and a new default gateway according to the information comprised in said context (paragraph 63).

Re claim 51, Wu and Narayanan discloses the mobile terminal according to claim 49, and Wu further discloses wherein the transmitter is adapted to transmit the location information to the context transfer manager within a paging message (paragraph 63; the location update can be construed as a paging message).

Re claim 52, Wu and Narayanan discloses the mobile terminal according to claim 49, and Narayanan further discloses to disclose further comprising a storage unit that stores information on failed access attempts to access networks (paragraph 42).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu" and "Narayanan" as a whole to produce the invention as claimed with a reasonable expectation of a storage unit that stores information on

failed access attempts to access networks for the benefit of speeding up the registration.

Re claim 53, Wu and Narayanan discloses the mobile terminal according to claim 49, and Wu further discloses wherein the transmitter is adapted to report status information to the context transfer manager indicating the quality of service achieved in the current access network and/or failed access attempts to at least one other access network than the current access network (paragraph 113 and 114).

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (Pub. No.: US 2003/0048773 A1) in view of Narayanan (Pub. No.: US 2003/0103496 A1) as applied to claim 25 above, and further in view of Prehofer (Pub. No.: US 2006/0099952 A1).

Re claim 36, Wu and Narayanan discloses the method according to claim 25, but fails to disclose wherein the location information received by the context transfer manager is received in a paging message transmitted by the mobile terminal or by a signaling message from an authentication server in the home domain of the context transfer manager after an authentication procedure performed between the mobile terminal and the authentication server.

However, Prehofer discloses wherein the location information received by the context transfer manager is received in a paging message transmitted by the mobile terminal or by a signaling message from an authentication server in the home domain of the context transfer manager after an authentication procedure

performed between the mobile terminal and the authentication server (paragraph 130 – 131).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu and Narayanan" and "Prehofer" as a whole to produce the invention as claimed with a reasonable expectation of the context transfer manager receiving a paging message transmitted by the mobile terminal or by a signaling message from an authentication server in the home domain of the context transfer manager after an authentication procedure performed between the mobile terminal and the authentication server for the benefit of indicating to the context transfer manager, which access router it will be visiting.

8. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (Pub. No.: US 2003/0048773 A1) in view of Narayanan (Pub. No.: US 2003/0103496 A1) as applied to claim 25 above, and further in view of Trossen et al. (Pub. No.: US 2003/0204599 A1).

Re claim 38, Wu and Narayanan discloses the method according to claim 26, but fails to disclose wherein the handover is performed upon having received context information from the context transfer manager related to the new access network.

However, Trossen discloses wherein the handover is performed upon having received context information from the context transfer manager related to the new access network (paragraph 21 and fig. 1).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu and Narayanan" and "Trossen" as a whole to produce the invention as claimed with a reasonable expectation of the handover being performed upon having received context information from the context transfer manager related to the new access network for the benefit of giving the mobile knowledge of the new access network to facilitate handoff.

Re claim 39, Wu and Narayanan discloses the method according to claim 25, but fails to disclose wherein a markup language based data format is used to describe the context transferred from the context transfer manager to the plurality of access networks and the mobile terminal.

However, Trossen discloses wherein a markup language based data format is used to describe the context transferred from the context transfer manager to the plurality of access networks and the mobile terminal (paragraph 32).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu and Narayanan" and "Trossen" as a whole to produce the invention as claimed with a reasonable expectation of using markup language based data format to describe the context transferred from the context transfer manager to the plurality of access networks and the mobile terminal for the benefit of efficient handover across different access technologies.

9. Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (Pub. No.: US 2003/0048773 A1) in view of Narayanan (Pub. No.: US 2003/0103496 A1) as applied to claim 25 above, and further in view of Amirijoo (Patent No.: 6,119,012).

Re claim 41, Wu and Narayanan disclose the method according to claim 40, but fails to disclose wherein the registration and/or authentication procedure comprises registering a security key of the mobile terminal.

However, Amirijoo discloses wherein the registration and/or authentication procedure comprises registering a security key of the mobile terminal (column 4, lines 63 – 65).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu and Narayanan" and "Amirijoo" as a whole to produce the invention as claimed with a reasonable expectation of the registration and/or authentication procedure comprising registering a security key of the mobile terminal for the benefit of preventing another mobile from stealing the connection.

Re claim 42, Wu and Narayanan discloses the method according to claim 41, but fails to disclose further comprising using by the mobile terminal the registered security key for communication upon attaching to the neighboring access network in which the security key has been registered.

However, Amirijoo discloses further comprising using by the mobile terminal the registered security key for communication upon attaching to the

neighboring access network in which the security key has been registered (column 5, lines 23 – 29).

Motivation to combine may be gleaned from the prior art contemplated. Therefore, one skilled in the art would have found it obvious from the combined teachings of "Wu and Narayanan" and "Amirijoo" as a whole to produce the invention as claimed with a reasonable expectation of using by the mobile terminal the registered security key for communication upon attaching to the neighboring access network in which the security key has been registered for the benefit of maintaining a secure channel for communication.

Response to Arguments

10. Applicant's arguments, see remarks page 11, filed 01/09/2009, with respect to the rejection(s) of claim(s) 25, 26, 30 – 33, 40, 42, and 44 - 46 under Narayanan (Pub. No.: US 2003/0103496 A1) in view of Prehofer (Pub. No.: US 2006/0099952 A1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Wu et al. (Pub. No.: US 2003/0048773 A1). Wu discloses a common context transfer manager that allows handover among heterogeneous networks.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NALIN PILAPITIYA whose telephone number is (571)270-7122. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael G. Perez can be reached on (571)272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NALIN PILAPITIYA/
Examiner, Art Unit 4154

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617